



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/535,364	03/24/2000	Michael J. Comb	NEB-138-CIP	2664

7590 05/03/2002

INTELLECTUAL PROPERTY COUNSEL
CELL SIGNALING TECHNOLOGY, INC.
166B CUMMINGS CENTER
BEVERLY, MA 01915

EXAMINER

TIZIO, STEVEN C

ART UNIT

PAPER NUMBER

1627

DATE MAILED: 05/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/535,364	COMB ET AL.
Period for Reply	Examiner	Art Unit
	Steven C Tizio	1627
<i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i>		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.		
<ul style="list-style-type: none"> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). 		
Status		
1) <input type="checkbox"/> Responsive to communication(s) filed on ____.		
2a) <input type="checkbox"/> This action is FINAL. 2b) <input checked="" type="checkbox"/> This action is non-final.		
3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) <input checked="" type="checkbox"/> Claim(s) <u>1-26</u> is/are pending in the application.		
4a) Of the above claim(s) ____ is/are withdrawn from consideration.		
5) <input type="checkbox"/> Claim(s) ____ is/are allowed.		
6) <input type="checkbox"/> Claim(s) ____ is/are rejected.		
7) <input type="checkbox"/> Claim(s) ____ is/are objected to.		
8) <input checked="" type="checkbox"/> Claim(s) <u>1-26</u> are subject to restriction and/or election requirement.		
Application Papers		
9) <input type="checkbox"/> The specification is objected to by the Examiner.		
10) <input type="checkbox"/> The drawing(s) filed on ____ is/are: a) <input type="checkbox"/> accepted or b) <input type="checkbox"/> objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
11) <input type="checkbox"/> The proposed drawing correction filed on ____ is: a) <input type="checkbox"/> approved b) <input type="checkbox"/> disapproved by the Examiner.		
If approved, corrected drawings are required in reply to this Office action.		
12) <input type="checkbox"/> The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120		
13) <input type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a) <input type="checkbox"/> All b) <input type="checkbox"/> Some * c) <input type="checkbox"/> None of:		
1. <input type="checkbox"/> Certified copies of the priority documents have been received.		
2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. ____.		
3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
14) <input type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).		
a) <input type="checkbox"/> The translation of the foreign language provisional application has been received.		
15) <input type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.		
Attachment(s)		
1) <input type="checkbox"/> Notice of References Cited (PTO-892)		
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)		
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.		
4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.		
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)		
6) <input type="checkbox"/> Other: _____		

DETAILED ACTION

Please note: *In an effort to enhance communication with our customers and reduce processing time, Group 1627 is running a Fax Response Pilot for Written Restriction Requirements. A dedicated Fax machine is in place to receive your responses. The Fax number is (703) 305-3704. A Fax cover sheet is attached to this Office Action for your convenience. We encourage your participation in this pilot program. If you have any questions or suggestions please contact Jyothsna Venkat, Ph.D., Supervisory Examiner, at Jyothsna.Venkat@uspto.gov or 703-308-2439. Thank you in advance for allowing us to enhance our customer service. Please limit the use of this dedicated Fax number to responses to Written Restrictions.*

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-8, drawn to the method for producing motif-specific, context-independent antibodies, classified in class 530, subclass 387.1.
 - II. Claims 9-11, drawn to the motif-specific, context-independent antibody, classified in class 530, subclass 387.1
 - III. Claims 12-13, drawn to the method for identifying an unknown substrate of an enzyme, classified in class 435, subclass 7.1.

- IV. Claim 14, 16, drawn to the method for detecting the modification state of a substrate, classified in class 435, subclass 7.1.
- V. Claims 15-16, drawn to the method for screening a drug, classified in class 435, subclass 7.1.
- VI. Claims 17-18, drawn to the method for identifying an enzyme, classified in class 435, subclass 7.1.
-  VII. Claims 19-22, drawn to the method for profiling protein levels or post-translational modifications, classified in class 435, subclass 4.
- VIII. Claim 23, drawn to the motif-specific, context-independent antibody which recognizes the substrate consensus sequence for Akt, classified in class 530, subclass 387.1.
- IX. Claim 24, drawn to the motif-specific, context-independent antibody which recognizes the substrate consensus sequence for PKA, classified in class 530, subclass 387.1.
- X. Claims 25-26, drawn to the motif-specific, context-independent antibody which recognizes the substrate consensus sequence for bulky ring-directed kinases, classified in class 530, subclass 387.1.

2. The inventions are distinct, each from the other because of the following reasons:

3. **Groups I-X** represent separate and distinct inventions. **Groups I, III-VII** are drawn to different methods and **Groups II, VIII-X** are drawn to different products (i.e.,

e.g., which are directed to different purposes, use different materials, recite different method or process steps for the preparation of different product(s), screening of different characteristics, such as different binding affinities, different biochemical reaction conditions, etc. or lead to different final results). Therefore, the groups that describe these products and methods have different issues regarding patentability and enablement, and represent patentably distinct subject matter, which merits separate and burdensome searches. Art anticipating or rendering obvious each of the above-identified groups respectively would not necessarily anticipate or render obvious another group, because they are drawn to different inventions that have different distinguishing features and/or characteristics. Each group will support separate patents.

4. **Groups II, VIII-X** relate to different products (i.e., e.g., which have different chemical compositions, physical properties, biochemical activities, and biochemical uses) and thus represent separate and distinct inventions. The invention of **Group II** relates to **any** antibody; the invention of **Group VIII** relates to an antibody which recognizes the substrate consensus sequence for Akt; the invention of **Group IX** relates to an antibody which recognizes the substrate consensus sequence for PKA; and the invention of **Group X** relates to an antibody which recognizes the substrate consensus sequence for bulky ring-directed kinases. The inventions of different **Groups II, VIII-X** are drawn to different products, which do not require each other and they are structurally different. Thus restriction between the groups is proper.

5. **Groups I, III-VII** are related to different methods (i.e., e.g., which have different functions, uses, starting materials, and produce different results) and thus represent separate and distinct inventions. The invention of **Group I** relates to the method for producing motif-specific, context-independent antibodies; the invention of **Group III** relates to the method for identifying an unknown substrate of an enzyme; the invention of **Group IV** relates to the method for detecting the modification state of a substrate; the invention of **Group V** relates to a method for screening a drug; the invention of **Group VI** relates to the method for identifying an enzyme; and the invention of **Group VII** relates to the method for profiling protein levels or posttranslational modifications. The different methods of **Groups I, III-VII** do not require each other. The results of the methods are different and the method steps are different. Thus restriction between the groups is proper.

6. Inventions of **Groups II** and **VIII-X** are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions relate to different antibodies. The antibody of **Group II** relates to *any* motif-specific, context-independent antibody whereas the antibodies of **Groups VIII-X** have different and specific consensus sequences (e.g. Akt, PKA, and bulky ring-directed kinases). Thus restriction between the groups is proper.

7. These inventions are distinct for the reasons above and have acquired a separate status in the art because of their recognized divergent subject matter and/or shown by their different classifications. While some of the aforementioned groups are classified under an identical class/sub-class, the corresponding non-patent literature search remains unaffected. Each of the identified groups may require different searches. For example, methods and products groups require different searches. Therefore, restriction for examination purposes as indicated is proper.

Election of Species

8. This application contains claims directed to the following patentably distinct species of the claimed invention:

A) If Groups I-VII are elected, applicants are requested to elect a single species of the following:

- 1) elect either a peptide comprising a fixed amino acid or a consensus site (e.g. MAPK substrate consensus sites, 14-3-3 consensus binding sites).
 - a) if a modified amino acid is elected, applicants are requested to elect a single species of modified amino acid (e.g. phosphothreonine, acetylated lysine)
 - b) if the fixed amino acid is not a modified amino acid, applicants are requested to elect one specific consensus sequence (e.g. MAPK substrate

consensus sites, 14-3-3 consensus binding sites) (applicants are requested to define the elected sequences).

- B) If **Groups IV-VII** is elected, applicants are requested to elect either an unmodified substrate motif or modified substrate motif.
- C) If **Group VII** is elected, applicants are requested to elect either profiling protein levels or post-translational modifications in **claim 19 and claim 21**.
- D) If **Group VIII** is elected, applicants are requested to define the substrate consensus sequence for Akt in **claim 23**.
- E) If **Group IX** is elected, applicants are requested to define the substrate consensus sequence for PKA in **claim 24**.
- F) If **Group X** is elected, applicants are requested to elect a single species of consensus sequence (e.g. [F/4][T/5]*) in **claim 26** (applicants are requested to define the substrate consensus sequence for bulky ring-directed kinases).

Each of the species are distinct from each other because the compounds are structurally and functionally different from each other and do not require the other for ultimate use; the species election for examination purposes as indicated is proper.

9. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, **claims 1-18, 20, 22, and 25** are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over

the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

10. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

11. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(l).

12. Applicant is required to reply to the restriction requirement within 30 days of mailing this action. See MPEP 809.2(a).

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Tizio whose telephone number is (703) 305-1903. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jyothsna Venkat, can be reached at (703) 308-2439. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3014.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Steven C. Tizio
Patent Examiner
Technology Center 1600
AU 1627


PADMASHRI PONNALURI
PRIMARY EXAMINER